



## **Everything you wanted to know about RCRA, but were afraid to ask**

Performance Track Teleseminar Summary

May 25, 2005

### **Speakers**

- Vern Myers, EPA's Office of Solid Waste, speaking about post-closure permitting and corrective action;
- Dale Ruhter, EPA's Office of Solid Waste, speaking about financial assurance;
- Charlotte Mooney, EPA's Office of Solid Waste, speaking about the definition of solid waste rule; and
- George Faison, EPA's Office of Solid Waste, speaking about the Performance Track RCRA incentives

### **Topic Summary**

This teleseminar focused on helping Performance Track members understand key components of RCRA, including financial assurance, post-closure permitting, corrective action, the definition of solid waste rule, and the Performance Track RCRA incentives.

### **Key Points from Presentations**

#### *Post-Closure Permitting and Corrective Action*

Any land-based unit that closes with waste left behind must get a post-closure permit. This permit typically requires the unit to meet various design requirements, have a cap, and have a groundwater monitoring system. The post-closure requirements apply for up to 30 years. In the event that a leak or spill is found, the affected area must be cleaned up. In 1998 a new rule came out (<http://www.epa.gov/epaoswer/hazwaste/closure/index.htm>) that added flexibility to these requirements. First, post-closure could be implemented under enforcement authority/order. Second, if the facility had releases to groundwater from more than one solid waste management unit, the corrective action could be wrapped into long-term corrective action. More information and a fact sheet can be found at <http://www.epa.gov/epaoswer/hotline/training/permits.pdf>). Information on which states are authorized to implement the post-closure permits and correction action can also be found at: <http://www.epa.gov/epaoswer/hazwaste/state/index.htm>.

#### *Financial Assurance Requirements*

- Financial Assurance can be required in three situations
  - For Closure/Post-Closure Care
    - Owner/operators of a treatment, storage, or disposal facility must provide financial assurance to close the facility and either remove the waste and decontaminate or leave waste on-site (e.g., for a landfill).

- There are various mechanisms for financial assurance, including trust, surety bond, letter of credit, insurance, or financial test/corporate guarantee. The most popular mechanism is the financial test/corporate guarantee.
- For coverage for third-party liability
  - For non-land based units for sudden occurrence (e.g., fires/explosions): \$1 million per occurrence/ \$2 million annual aggregate
  - For land-based units for non-sudden occurrence: \$3 million per occurrence/\$6 million annual aggregate
  - These dollar amounts can be adjusted on the basis of risk.
- For Corrective Action
  - If corrective action is needed or not completed for one unit at the time of permit issuance, you must provide financial assurance for the completion of the corrective action.

#### *Definition of Solid Waste/Hazardous Waste Recycling*

The Definition of Solid Waste is the part of the hazardous waste regulations that tells you whether a material is a hazardous waste when it is being recycled. The regulations try to make the distinction between times when recycling is more like production vs. times when recycling is more like disposal. EPA is aware that this is a difficult line to draw. As a result, the regulations are complicated and are updated from time to time to respond to court decisions.

The latest revisions were proposed on October 28, 2003, and consisted of two parts:

- 1) The proposal provided an exclusion for materials that are recycled within the generating industry. Materials recycled in this manner would not be considered solid waste and thus would not be considered hazardous waste. For example, if a spent solvent from a paint-manufacturing facility were recycled at that facility, or if another paint manufacturing facility could reuse or pull value out of the material, then that material would not be considered a solid (or hazardous) waste. The proposed requirements associated with the exclusion are:
  - A one-time notification would need to be submitted to EPA;
  - The material could not be used in a manner constituting disposal (placed on the land);
  - The material could not be burned for energy recovery;
  - The material would have to be used in a reasonable amount of time (75 percent used within a calendar year); and
  - The exclusion could only apply to "legitimate recycling."
- 2) The proposal codifies what EPA means by "legitimate recycling" using four criteria (that have been used in various Federal Register notices going back to 1985). A weight-of-evidence approach would apply so that if all four criteria were not explicitly met, some criteria could be balanced against the missing criterion. The criteria are:
  - The material must be managed like a valuable material (for example, like similar raw material);

- The material must provide a useful ingredient or serve a function (e.g., as a catalyst);
- The process must yield a valuable product or intermediate; and
- The product cannot contain significant toxics compared with non-waste-derived products). If there are significant toxics, these are considered “toxics along for the ride.”

EPA is currently reviewing comments on the proposal, which were wide-ranging and included other proposed approaches. EPA hopes to publish a final rule in November 2006, but may want or need to publish a notice or request additional comments before then.

#### *Performance Track RCRA Incentives*

These incentives, which apply only to members of Performance Track, were designed to: 1) recognize and reward environmental accomplishments; 2) encourage facilities to go beyond basic compliance; 3) allow members to become more efficient; and 4) demonstrate that innovation is a core part of what Performance Track members do. One incentive is on the books, one is part of a proposed rule, and several more are under consideration:

On the books:

- In April 2004, EPA extended the 90-day hazardous waste storage period for Performance Track members to 180 days (or 270 days if the disposal site is more than 200 miles away). To take advantage of this incentive, Performance Track facilities must notify their state RCRA program. EPA has asked states to adopt this flexibility as soon as possible, and has allowed states that have adopted it in their RCRA program to implement it while they are seeking authorization from EPA.

Proposed:

- In the proposed RCRA burden reduction rule, self-inspection of tanks, containers, containment areas, and areas subject to spills would be permitted monthly rather than weekly for Performance Track members that have permitted units.. Members would still need to deal with spills in secondary containment in 24 hours (usually through a leak detection system). EPA hopes this rule will be finalized early next year.

On the drawing board:

- 1) One option would exempt units at large-quantity generators (LQGs) and permitted facilities from the RCRA air standard if the facility is also subject to Clean Air Act standards and performs appropriate work management practices.
- 2) EPA has proposed a rule allowing standardized permits to be used at facilities that store or treat waste on site. The Performance Track incentive would allow Performance Track facilities to accept waste from off-site and still be able to take advantage of the standardized permit.
- 3) Performance Track members could use performance-based standards for containers and tanks at LQG facilities (similar to RCRA Part 279 standards for used oil) rather than the prescriptive standards in Subparts I and J.
- 4) Under RCRA there are three classes of permit modifications. Minor modifications are Class 1, more in-depth changes (such as the type of waste handled) would be Class 2, and major changes for the facility would be Class 3. Under the proposed incentive, Performance Track members could undertake a Class 2 modification as a Class 1 modification, and a Class 3 modification as a Class 2 modification. This incentive would not apply to increases in capacity for landfills or incinerators.

- 5) Expediting corrective actions was also highlighted by Performance Track members as a membership incentive. OSW will recommend that, for Performance Track facilities, the lead regulator (state or EPA) consider using flexible results-based approaches such as facility-lead corrective action agreements and a reduced oversight approach, contained in the 2003 Results-Based Corrective Action Guidance. Language addressing the guidance may be included in the upcoming draft RCRA incentives rule.

**Q and A.**

Q. Does the proposed rule (dealing with recycling) apply to regenerating carbon by the supplier? Would it matter if the carbon were a listed or characteristic waste?

A. The proposed rule might apply. It would depend on whether the regeneration process is a thermal process. The exclusion would apply to both listed and characteristic wastes for spent materials. Carbon regeneration in a thermal treatment unit might have a different regulatory structure.

Q. If I send something for recycling that would qualify under a recycling exclusion, what documentation would I need from the recycler?

A. There aren't specifics about what the documentation required under 40 CFR 261.2(f) must contain. Instead, this section has more general requirements, such as showing there is a real market for the recycled material. You should also check with your state to see if they require more specific information or, if you are unsure about the process, if they agree with your regulatory analysis.

Q. My state (Oregon) wants a certificate of recycling from disposal facilities. Many facilities are not willing to provide these. Instead the facilities are claiming my bill of lading or manifest is sufficient. In particular, does my universal waste (e.g., mercury thermometers) require documentation?

A. First, under the federal program, the only mercury-containing devices included under universal wastes are mercury thermostats. EPA is in the process of publishing a rule to expand universal wastes to include all mercury-containing equipment. States would then need to adopt this standard. However, some states have already adopted additional types of equipment in their state universal waste programs, as you describe. So, if Oregon regulations are like federal regulations, there is no actual tracking document for universal wastes, but you must comply with DOT regulations. If you have sufficient quantity of mercury you might need to use the DOT hazardous shipping documents. You would also need to keep some records on-site about the universal wastes you send off-site. Second, a certificate of recycling is not part of the federal program. EPA is not sure about Oregon's requirements.

A lengthy discussion of F006 followed:

Q. We have heard that a facility in Utah had been granted an exemption for F006 (listed wastewater sludges from electroplating operations) but we have been unable to locate any information about this exemption. How did this facility get their sludge exempted?

A. The only facility-specific exclusion is the delisting petition. Most states are authorized for a delisting, so if an exclusion was granted in Utah, it would be publicized in their state equivalent of the Federal Register.

Q. The problem is that so many materials fall into the definition of F006, even if they don't have any toxic characteristics. We were hoping Performance Track members could get an expedited exemption from a generic denotation like F006, when there are no toxicity characteristics whatever. For example, our facility recycles rinse water from plating baths using ion exchange followed by reverse osmosis. The toxic characteristics are removed in ion

exchange, and the rinse water could be discharged at that point. However, to save water, the facility then uses microfiltration (reverse osmosis) to recycle the water back to the process. Because the rinse water comes from plating baths, those membranes qualify as F006, even though they pass the Toxicity Characteristic Leaching Procedure (TCLP). Additionally, our sludge, which is 23 percent copper, is being recycled because of its value, but instead of being paid for the copper content we are paying someone to recycle it. If it wasn't categorized as F006, we could get some return on this material.

A. The delisting provisions are for exactly these sorts of situation when there is a generic listing but there are specific materials that don't have any hazardous components. States are authorized to implement different parts of RCRA, including delisting.

Q. The F006 sludge itself might not pass the TCLP for lead and/or might be corrosive. But it clearly has value based on its copper content. Is there any possibility of getting the definition redefined to promote better use of these materials?

A. We are working on an F006 recycling rule that would allow a material to be subject to either no hazardous waste requirements or streamlined hazardous waste requirements if there is sufficient metals content that could be recovered. We are hoping to get this proposal out for public comment late in 2005 or early in 2006.

Q. Could there be a provision for things like reverse osmosis membranes be included in this F006 proposal, especially if they pass the TCLP?

A. EPA suggests you talk to your state about delisting in this specific case. They might be able to tell you pretty quickly whether delisting was a viable option in this case.

Q. Nonetheless, EPA should still consider non-toxics derived from F006.

A. Part of what makes that complicated is that the toxic characteristics don't capture all the toxic properties that materials are listed for. We will not be addressing low toxicity in this recycling rule. But EPA is in the very preliminary stages of considering relisting F006 to look at these issues. Given time and budget limitations, this could still be a long way off.

Q. Someone else asked for clarification about why the reverse osmosis membrane would be a hazardous waste if you could release the water from the previous stage?

A. (From the facility rep) It is a continuous process.

A. EPA agreed to help to work on this issue offline.

A final question:

Q. Could someone say more about low-priority inspections for Performance Track facilities?

A. This isn't RCRA specific. Within Performance Track in general, members are a low priority for routine inspections. About a dozen states have adopted this provision.